COMPUTER SCIENCE
in
ARKANSAS

NEW CS & CYBERSECURITY TASK FORCE

Governor Hutchinson announced during CS Education Week that Arkansas was establishing a new task force for Arkansas. This task force is composed of leaders in education, industry, and government. Members will assess the state's computer science and cybersecurity education programs and make recommendations to continue and enhance the progress made over the past five years.

When Governor Hutchinson spoke of Arkansas' success, he also stated, "But we can't rest on that success. Technology moves quickly. If we are going to give our students the best computer science education possible, we must constantly assess our progress and implement the programs that will attract and inspire our students and educators. When our goal is a first-rate computer science education for our students, our educational innovation will continue as a model for the rest of the nation."

The governor has asked members to provide guidance on improving and establishing updated large-scale goals and strategies; industry pathways and relevant certifications for major areas of computer science and computing; post-secondary alignment strategies and goals; work-based learning opportunities for students; teacher credentialing; correct placement and focus on data sciences and cybersecurity in curricula; potential funding usage and future needs; and outreach and development of educational materials. A final report will be submitted to the governor in November.

Task Force Members are:

Adam Holland, Walmart
Allison Nicholas, Metova, Inc.
Ann Clemmer, Arkansas Department of Higher Education
Anna Beth Gorman, Women's Foundation of Arkansas
Anthony Owen, Arkansas Department of Education
Britt Cagnina, Elyxor
Bryan Hill, PhD, University of Arkansas at Fayetteville
Carl Frank, Arkansas's Computer Science Teachers Assoc.
Dave Wengel, iDatafy
Dr. Allison Roberts, Office of Governor Hutchinson
Dr. Angela Kremers, Department of Career Education
Dr. Charisse Childers, Department of Workforce Services
Dr. Hung-Chi Su, Arkansas State University
Dr. Sarah Moore, Arkansas State Board of Education
Dr. Stephen Addison, University of Central Arkansas
Errin Stanger, Arkansas Regional Innovation Hub

Gary Stark, Walton Family Foundation
Gopala Krishnan, DXC Technology
James Hendren, PhD, Technology Startup Consultant
Jeston George, Apptegy
Joel Gordon, Scott Family Amazeum
John Ciesla, Greenwood School District
Karma Turner, Lake Hamilton School District
Lee Watson, Arkansas Cyber Alliance
Michael Armstrong, United Arkansas Credit Union
Mike Rogers, Tyson
Phillip Young, Arch Ford Education Service Cooperative
Susan Norton, Arkansas Academy of Computing
Tom Chilton, Arkansas Economic Development Commission
William Yoder, Arkansas Center for Data Sciences
Yessica Jones, Division of Information Systems

SECURITY CURRICULUM & COURSE PATHWAY

A three-year cybersecurity curriculum and course pathway—available to all Arkansas public school students—will be created through a partnership of the Arkansas Department of Education's Office of Computer Science, Arch Ford ESC Virtual Arkansas division, the University of Arkansas at Little Rock (UALR), and the University of Central Arkansas at Conway (UCA). This curriculum should be available to students by the beginning of the 2020-2021 school year.

The intent of this curriculum is to better prepare Arkansas students for industry-recognized certifications and post-secondary cybersecurity programs. Need help getting started; ADE is providing a one-time grant in the amount of $94,500 to be used to develop the curriculum and provide resources.

This pathway will have at least three courses that address the fundamentals of computer science; introductory through advanced cybersecurity concepts; online cybersecurity CyberGym modules using the power of Google's cloud computing services.

153 STUDENTS RECEIVE MORE THAN $119,000 FOR QUALIFYING AP CS EXAM SCORES

The Arkansas Department of Education has announced that 153 students and 20 schools under the Arkansas Advanced Placement Computer Science A Incentive Program were awarded money for their efforts on the AP CS Exam.

The purpose of the incentive program, in its second year, is to increase the number of qualifying scores (3, 4, or 5) on Advanced Placement Computer Science A exams.

The districts representing the top ten amounts awarded for 2018-2019 are listed below.
Haas Hall Academy: $18,700
Fort Smith School District: $17,150
Little Rock School District: $15,900
Rogers School District: $14,150
Fayetteville School District: $9,100
Bentonville School District: $8,500
Valley View School District: $7,500
Conway School District: $5,250
Russellville School District: $4,250
Springdale School District: $4,200

WINNERS FOR THE $2,000 CSTA SCHOLARSHIP ANNOUNCED

The Arkansas Department of Education Division of Computer Science is excited to offer $2,000 to 35 recipients.

Each candidate entered the scholarship request form, along with three letters or recommendation and an essay on how being funded would help further their professional growth and the growth of computer science in Arkansas.

The candidates were then screened and scored by a large committee and selected based on submissions.

The winners are:
Carole Anderson, Jessica Ballou, Mindy Bissett, Phillip Blake, Robin Boerwinkle, Eden Buergler, Kevin Collins, Kiley Corbitt, Julia Cottrell, Tricia Dykes, Cynthia Fowler, Tara Gates, Michael Herren, Holly Herron, Michael Hill, Sheila Hopson, Amy Locke, Warren Maddox, Vincent Matthews, Emily Nash, Michele Owen, Rachel Poor, Lisa Posey, Kimberly Raup, Ryan Raup, Tate Rector, Abbie Russell, John Russell, Rhiannon Sniffin, Courtney Speer, Margaret Thompson, Jamie Varnell, Steven Ward, Landon West, Henry Wooten

CS SPECIALIST SPOTLIGHT

Ever met someone who made their hobby into their job? Or been told by your teachers to make a career out of something you love? Eli McRae is a prime example of someone who has mastered this. McRae stated, "My hobbies are one of the primary reasons that I am employable. I enjoy building side projects using new technologies. Sometimes, that is software. Sometimes, that's using new microcontrollers. I am always angling for how I can sell/leverage some skill or service. Daydreaming about how to make a buck using computers is a hobby, right?"

McRae came to the computer science team via the Arkansas Air National Guard. When asked what led him to academia his response was, "Finding ways to avoid academia is what led me to academia. I never thrived in school and was never impressed by my teachers or professors with regard to whatever was being taught. I found the extracurricular activities more interesting (chess club, computer side-projects, etc.) I spent a long time trying to get out of school. Eventually, I joined the Arkansas Air National Guard for 8 years and held several positions in IT. I was separated from the guard for two years before I encountered a unit at Little Rock Air Force Base that was in need of people to teach cybersecurity concepts. I reenlisted so that I could become an instructor for that course. I eventually found my way to WDMESC where I teach cybersecurity and computer science concepts to teachers around the state. I am also still an instructor at LRAFB."

McRae has several specialties that add value to the CS for AR team, such as Python, Javascript, Java, & Go. He also has certifications in: CompTIA Security+, CySA+, PenTest+, and the GNFA. However, he feels his specialty is "helping throw gas on someone else's fire regarding a computer science project. I love knowing how people break stuff. I also love sharing what I know with others."

Surprisingly, when asked about his favorite CS tool, McRae spoke instead about the importance of empathy and thinking from the perspective of your client. His advice is to listen to a problem in good faith and be able to strengthen someone else's argument for them. He iterates that this is especially important if you disagree or don't hold the same view as them.

McRae can be reached at emcrae@wilbur.k12.ar.us or caught at various cybersecurity trainings across the state.

NEW CS BOOKS FOR MIDDLE SCHOOLS

On December 11, 2019, as part of Governor Asa Hutchinson's Computer Science Initiative, the Arkansas Department of Education (ADE) Office of Computer Science announced that public school libraries K-8, would receive the computer science books *Secret Coders (Volume #1)* and *Journey Through the United Field*.

Additionally, libraries that serve K-5 students would receive the computer science books *Who Says Women Can't Be Computer Programmers? The Story of Ada Lovelace* and *Hello Ruby: Adventures in Coding*.

GIRLS OF PROMISE: TECH FOR GOOD CONFERENCE

The Girls of Promise Tech for Good Conference is scheduled for April 2-3, 2020 in Little Rock, Arkansas. The conference is aimed at eighth-grade girls interested in science, technology, engineering, arts and math. More than 200 girls are expected to attend. The event is designed to encourage more female participation in STEM fields and provide valuable experiences in the hopes it will pique interest in taking more STEM-related classes resulting in more jobs in the future.

This conference provides an avenue for students searching for careers even if they are not completely sure where their interests or talents lie, and it provides them a chance to see the opportunities that can await them.

Girls of Promise focuses on presenting professional and engaging women as role models for the girls. Events are interactive; the role models will often sit with the students during mini sessions so that experiences can be shared and discussed.

Student groups are named after great women in history. As the event progresses, the students learn more about their historical figure and her achievements.

ASMSA CS PLUS REGISTRATION NOW OPEN
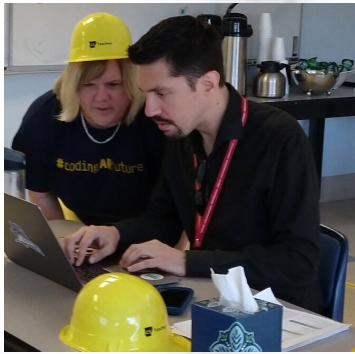
Since 2015, the Arkansas School for Mathematics, Sciences, and the Arts has provided computer science teachers with professional development, digitally-delivered content aligned to state standards, and ongoing support to Arkansas students and teachers.

The "Plus" Model combines face-to-face teacher professional development, year-long support, and digitally-delivered course content. For each course, on-site teachers attend an intensive summer boot camp to get up to speed with the course content and the delivery method.

Weekly learning modules are delivered online to the local-level, on-site facilitating teacher and their students, with multiple opportunities for both teachers and students to interact with the ASMSA specialists each week. The end goal is for the on-site teacher to gain familiarity with the material along with their students in the first year and to teach the course independently going forward.

Teachers interested in signing up for the CS Plus Program can fill out the registration form: http://bit.ly/CSPlusReg

---

Would you like some Pi with that?: An Introduction to Physical Computing with the Raspberry Pi

Open to any teacher, but especially 7-8, who is interested in learning about physical computing and beginner-friendly programming.

2/12 - Great Rivers
2/13 - South Central
3/05 - Arch Ford
3/11 - Crowley's Ridge
3/11 - Southwest
3/12 - Northcentral
3/19 - Northeast
4/08 - Northwest
4/22 - Guy Fenter

UPCOMING EVENTS

Arduino: An Introduction to Physical Computing

Open to any teacher, but especially 7-8, who is interested in learning about physical computing and beginner-friendly programming.

2/13 - DeQueen/Mena
2/18 - Arkansas River
3/11 - Southeast
3/12 - Wilbur D. Mills
4/21 - O.U.R.

Taco-bout Coding with Scratch!

Looking for new ways to get your students excited and engaged through computer science? Do you love Tacos? This nacho-average training will focus on Scratch, a free online block-based coding program. Participants will work through activities that they can take back to their classroom.

3/09 - Arkansas River
3/10 - Southeast
3/11 - Great Rivers
4/06 - Arch Ford
4/07 - Northcentral
4/08 - Crowley's Ridge
4/09 - O.U.R.

CONTACT US

Four Capitol Mall
Little Rock, AR 72201

CSforAR@arkansas.gov

SOCIAL MEDIA

#ARKidsCanCode
#CSforAR